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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/830,187	06/25/2001	Monte Bruce Wilson	Q63960	2958

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[REDACTED] EXAMINER

HARDEE, JOHN R

ART UNIT	PAPER NUMBER
1751	[REDACTED]

DATE MAILED: 11/26/2002

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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/830,187	WILSON, MONTE BRUCE	
	Examiner	Art Unit	
	John R Hardee	1751	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

**A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM
THE MAILING DATE OF THIS COMMUNICATION.**

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on _____ .
- 2a) This action is **FINAL**. 2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 1-15 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) Claim(s) _____ is/are allowed.
- 6) Claim(s) 1-7, 11-13 and 15 is/are rejected.
- 7) Claim(s) 8-10 and 14 is/are objected to.
- 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on _____ is/are: a) accepted or b) objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) The proposed drawing correction filed on _____ is: a) approved b) disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____ .
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

- 14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) The translation of the foreign language provisional application has been received.
- 15) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) <input type="checkbox"/> Notice of References Cited (PTO-892)	4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____ .
2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)	5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)
3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ .	6) <input type="checkbox"/> Other: _____ .

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

1. Claims 1-7, 11-13 and 15 are rejected under 35 U.S.C. 102(b) as being anticipated by Henry, US 5,421,192. Claims 1-7, 11 and 12 are rejected under 35 U.S.C. 102(b) as being anticipated by Henry, US 5,421,192. The reference discloses compositions comprising naphthalimide fluorescent dyes, refrigeration lubricants and lubricant inhibitors which are incorporated into a refrigeration system (col. 2, lines 10+). Suitable lubricants include hydrocarbons, including natural and refined mineral oils, synthetic hydrocarbons, alkylbenzenes, polyalphaolefins, etc. In most cases, the dye should be solubilized by an appropriate solvent. Dye is present in a concentration of at least 0.001 g of dye per 100 g of refrigeration working fluid. As a refrigerant works by condensation to a liquid and expansion to a gas, the composition is at least partially in the liquid phase. A condensation vessel may be reasonably inferred as being present, and this reads on applicant's recitation of a cylinder, in the sense that a pressure vessel is broadly referred to as a cylinder. Suitable refrigerants, including some of those recited by applicant, are disclosed at the top of col. 3. Claims 11 and 12 are drawn to intended use. As the compositions are anticipated, these claims are as well. The compositions are disclosed as circulating through the refrigeration system, implying mutual solubility.

2. Claims 1-7, 11-13 and 15 are rejected under 35 U.S.C. 102(b) as being anticipated by Parekh, US 4,758,366. See claim 1, which recites a composition

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consisting of a polyhalogenated hydrocarbon refrigerant, a refrigeration oil and a fluorescent dye in a solvent. A suitable naphthalimide dye is disclosed at col. 3, lines 47+. Many of the recited refrigerants and oils (col. 4, lines 15+) read on those recited by applicant. Dye is present in a concentration of at least 0.001 g of dye per 100 g of refrigeration working fluid (col. 3, lines 20+). As a refrigerant works by condensation to a liquid and expansion to a gas, the composition is at least partially in the liquid phase. A condensation vessel may be reasonably inferred as being present, and this reads on applicant's recitation of a cylinder, in the sense that a pressure vessel is broadly referred to as a cylinder. Claims 11 and 12 are drawn to intended use. As the compositions are anticipated, these claims are as well. The compositions are disclosed as circulating through the refrigeration system, implying mutual solubility.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

4. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.

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2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

5. Claims 1-7, 11-13 and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over either Parekh or Henry, as summarized above. The claims are obvious because they are anticipated.

6. Claims 1-7, 11-13 and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over WO 98/54150. The reference discloses naphthalimide dyes which can preferably be used in refrigerated lubricants (p. 6, lines 16+) based on mineral oils or other hydrocarbons. Preferably, the refrigerant lubricants are miscible in all proportions with R-134a (p. 6, lines 20+). The dye compound is used at about 0.01% to 0.008% (p. 7, lines 17+). Where necessary, the dye may be dissolved in a carrier solvent (p. 5, lines 13+). This reference differs from the claimed subject matter in that it does not disclose a composition which reads on applicant's claims with sufficient specificity to constitute anticipation.

It would have been obvious at the time the invention was made to make such a composition, because this reference teaches that all of the ingredients recited by applicants are suitable for inclusion in a leak detection composition which is subsequently added to a refrigerant. The person of ordinary skill in the surfactant art would expect the recited compositions to have properties similar to those compositions which are exemplified, absent a showing to the contrary.

In the case where the claimed ranges overlap or lie inside ranges disclosed by the prior art, a *prima facie* case of obviousness exists. *In re Wertheim*, 541 F.2d 257,

191 USPQ 90 (CCPA 1976); *In re Woodruff*, 919 F.2d 1575, 16 USPQ2d 1934 (Fed Cir. 1990).

Allowable Subject Matter

7. Claims 8-10 and 14 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. Reasons are of record in the previous office action.

Response to Arguments

8. Applicant's arguments filed October 9, 2002 have been fully considered but they are not persuasive. Applicant argues that Henry is drawn to the addition of a dye to a circulatory refrigerant system, and that Henry does not add the dye to the liquified refrigerant for long-term storage. This is not persuasive because, as long as the refrigerant circulates, as described by applicant, the dye will make its way into the liquified portion of the refrigerant. Clearly, some portion of the refrigerant will be liquid, because this is necessary to achieve refrigeration. Regardless of whether Henry makes this composition *in situ*, rather than preparing such a composition for addition *in toto* to a refrigeration system, the compositional limitations of the rejected claims are met by the disclosure of Henry.

9. Applicant's arguments regarding Parekh and the WO are similar. Applicant's arguments regarding the advantages of a pre-formed composition are well taken, but disclosure of such advantages cannot overcome a rejection based on anticipation. If

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applicant wishes to overcome the WO based on a long-felt need or commercial success, he is advised to follow the procedures in the MPEP for doing so.

10. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to the examiner, Dr. John R. Hardee, whose telephone number is (703) 305-5599. The examiner can normally be reached on Monday through Friday from 8:00 until 4:30. In the event that the examiner is not available, his supervisor, Dr. Yogendra Gupta, may be reached at (703) 308-4708.

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12. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 308-0661.



John R. Hardee
Primary Examiner
November 22, 2002